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United States Patent [19]

Okada et al.

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[54] **DENTAL RESTORATIVE MATERIAL**

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[30] **Foreign Application Priority Data**

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[51] **Int. Cl.**[5] **A61F 2/00**; C08J 5/10; C08K 3/36; C08L 33/12

[52] **U.S. Cl.** **523/115**; 523/116; 523/212; 523/213

[58] **Field of Search** 523/116, 115, 212, 213

[56] **References Cited**

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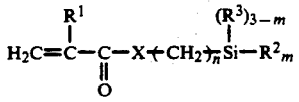
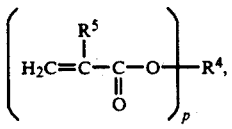
[57] **ABSTRACT**

Provided is a dental restorative material having high mechanical strength, abrasion resistance, hardness and excellent aesthetic appearance because it contains a large amount of an ultrafine filler having a particle size of 0.1 μm or less, and can hence be used for restoring molars as well as foreteeth. The dental restorative material comprises an inorganic filler with a size of 0.1 μm or less which is insoluble in water and surface-treated with a silane coupling agent represented by the following general formula:



and a (meth)acrylate monomer composition containing at least 50% by weight based on the weight of the composition of at least one hydrophobic multifunctional (meth)acrylate represented by the following general formula:



said surface-treated inorganic filler being incorporated in an amount of at least 100 parts by weight based on 100 parts by weight of said monomer composition.

10 Claims, No Drawings